

REMARKS

Claims 1-10, 12-15 remain under active prosecution in the present application. Claim 11 is canceled. Claims 1, 2, 7, 8, 12, 14 and 15 are amended. Applicants respectfully assert that all amendments are supported by the original disclosure and do not introduce new matter. Moreover, Applicants further respectfully assert that the amendments merely clarify the scope of the claims.

In the subject Office Action dated June 28, 2004, claims 1-15 were rejected under 35 U.S.C. § 112 for failing to comply with the enablement requirement as explained: "The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification, or the claims or drawings do not adequately convey where the lateral articulation and rotation means are located on the tool and if they replace or are coupled to the articulation means and rotation that are shown in figures 1,2 and 6-8."

Applicants respectfully traverse the rejection under U.S.C. § 112, first paragraph, of claims 1-15. Applicants assert that sufficient enablement is provided for one of ordinary skill in the art to appreciate and understand the rotational articulation control 13 of FIGS. 1-2, 6-9 and Paragraphs [0053-0057]; an alternative lateral-to-longitudinal articulation control 400 of FIG. 12 and Paragraphs [0064-0069]; and a further alternative lateral-to-rotational articulation control 500 of FIGS. 13-16 and Paragraphs [0070-0075]. However, to further clarify and to correct some obvious typographical errors regarding these versions, Applicants have submitted a number of amendments to the specification that are supported by the original disclosure and do not add subject matter. With particular reference to amendment to the Specification of Paragraphs [0065], an excerpt has been taken from Paragraphs [0007-0008] of the U.S. Patent Application Serial No. 10/615,973 filed on 09 July 2003, "SURGICAL INSTRUMENT INCORPORATING AN ARTICULATION MECHANISM HAVING ROTATION ABOUT THE LONGITUDINAL AXIS" to Kenneth S. Wales, Douglas B. Hoffman, Frederick E. Shelton IV, and Jeff Swayze, which was cross referenced and incorporated by reference in Paragraph [0001] of the present application.

Applicants request that these amendments to the Specification be entered and the rejection under §112 of claims 1-15 be withdrawn.

Applicants appreciate the indication from the Examiner that no prior art was applied against claims 2-4, 7-10,12, and 14 under 35 U.S.C. §102 or §103. Applicants have thus rewritten claims 2, 7, 12 and 14 into independent form. Assuming that the §112 rejection to be removed, claims 2, 7, 12 and 14 as well as claims 3-4, 8-10 that depend therefrom, should thus be in condition for allowance.

Turning to claim 1, the claim as amended recites in part a surgical instrument whose shaft articulates at an articulation mechanism in an articulation plane bisected by the shaft. A lateral control actuator intuitively moves laterally and linearly parallel in a lateral motion aligned to this plane in response to user input. This linear lateral motion provides an intuitive manner of articulation.

In the subject Office action, Claims 1, 5, 6, 11, 13 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Milliman et al (US 6,241,139) in view of Bolanos et al (US 5,575,799). The Examiner made the following application of the cited references:

In regard to claims 1,11,13 and 15, Milliman discloses the invention substantially as claimed including a surgical instrument 10, handle 22, shaft 14, which contains the firing, articulation and rotation mechanisms, anvil 20, a firing device, with cutting blade 280, which travels in channel 282, end effector 17, and articulation mechanism 120 comprised of actuation lever 30, which causes articulation of the end effector as it is moved (see Figs. 1,4,9,10 and C9.L22-29). What Milliman does not disclose is the use of a lateral moving member to articulate the end effector. However, Bolanos teaches that it is old and well known in the art of surgical tools to provide an actuation member 113, which when movingly rotated in a lateral direction articulates the end effector 107 for the purpose of allowing the user to efficiently work at different angles (see Figs. 1,2,5 and C5.L30-43). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the invention of Milliman with the articulation means as taught by Bolanos for the purpose of allowing the user to efficiently work at different angles.

Applicants wish to point out that the actuator ring 113 differs from the claim as amended in that Bolanos teaches an end effector that rotates about a helical gear connection to the shaft. The shaft is rotated by this actuator ring 113. Consequently,

Bolanos fails to articulate in a plane and further doesn't have an articulation control that moves linearly and laterally to intuitively give feedback to the user as to which direction in this articulation plane that the end effector will move. This is especially true since often the shaft includes rotation about the longitudinal axis. A rotation knob around the base of the shaft or similar control would tend to cause confusion with a rotated articulation control.

Consequently, claim 1 as amended is not disclosed or suggested by the cited references, either singularly nor in combination. Moreover, there is no suggestion or motivation in the cited references to address the problem of providing an intuitive lateral, linear motion to control articulation that intuitively suggests articulation of the end effector within a plane bisected by the longitudinal axis of the shaft. Reconsideration and allowance of claim 1 is respectfully requested, as well as for claims 5 and 6 that depend therefrom.

Turning to claim 15, the claim as amended recites in part a lateral control member moveable laterally and linearly to said longitudinal axis in corresponding alignment with a plane formed by the end effector in moving between first and second positions and operably coupled to said rotatable member, wherein lateral movement of said lateral control member moves said end effector from said first to said second position.

The claim was rejected on the same basis as claim 1. For the reasons given above for claim 1, the articulation control recited as amended in claim 15 is not taught or suggested by the cited references. Reconsideration and allowance of claim 15 is respectfully requested.

Conclusion

In light of the amendments and remarks made herein, it is respectfully submitted that the claims currently pending in the present application are in form for allowance. Accordingly, reconsideration of those claims, as amended herein, is earnestly solicited. Applicants encourage the Examiner to contact their representative, David Franklin at (513) 651-6856 or dfranklin@fbtlaw.com.

The Commissioner for Patents is hereby authorized to charge any deficiency or credit any overpayment of fees to Frost Brown Todd LLC Deposit Account No. 06-2226.

Serial No. 10/615,972

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September 1, 2004

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